

## Publications

1. Mardi, A.H., Dadashazar, H., McDonald, A., Braun, R., Crosbie, E., Xian, P., Thorsen, T., **Coggon, M.M.**, Fenn, M., Ferrare, R., Hair, J., Woods, R., Jonsson, H., Flagan, R.C., Seinfeld, J.H., and Sorooshian, A. Biomass burning plumes in the vicinity of the California coast: Airborne characterization of physiochemical properties, heating rates, and spatiotemporal features. *J. Geophys. Res.*, submitted.
2. Decker, Z., Zarzana, K., **Coggon, M.M.**, Min, K., Pollack, I., Ryerson, T., Peischl, J., Edwards, P., Dube, W., Markovic, M., Roberts, J.M., Veres, P.R., Graus, M., Warneke, C., de Gouw, J.A., Hatch, L., Barsanti, K., and Brown, S.S. (2018). Nighttime aircraft intercepts of biomass burning plumes: observations and box model analysis. *Environ. Sci. Technol.*, submitted.
3. Zarzana, K.J., Selimovic, V., Koss, A.R., Sekimoto, K., **Coggon, M.M.**, Yuan, B., Dube, W.P., Yokelson, R.J., Warneke, C., de Gouw, J.A., Roberts, J.M., and Brown, S.S. (2018). Primary emissions of glyoxal and methylglyoxal from laboratory measurements of open biomass burning. *Atmos. Chem. Phys.*, accepted.
4. Sekimoto, K., Koss, A.R., Gilman, J.B., Selimovic, V., **Coggon, M.M.**, Zarzana, K.J., Yuan, B., Lerner, B.M., Brown, S.S., Warneke, C., Yokelson, R.J., Roberts, J.M., and de Gouw, J. (2018). High- and low-temperature pyrolysis profiles describe volatile organic compound emissions from western US wildfire fuels. *Atmos. Chem. Phys.*, 18, 9,263–9,281, DOI:10.5194/acp-18-9263-2018
5. Sorooshian, A., MacDonald, A.B., Dadashazar, H., Bates, K.H., **Coggon, M.M.**, Craven, J.S., Crosbie, E., Hersey, S.P., Hodas, N., Lin, J.J., Negron Marty, A., Maudlin, L.C., Metcalf, A.R., Murphy, S.M., Prabhakar, G., Rissman, T.A., Shingler, T., Varutbangkul, T., Wang, Z., Woods, R.K., Chaung, P.Y., Nenes, A., Jonsson, H.H., Flagan, R.C., and Seinfeld, J.H. (2018). A Multi-Year Data Set on Aerosol-Cloud-Precipitation-Meteorology Interactions for Marine Stratocumulus Clouds. *Scientific Data*, 5 (180026), 1–13, DOI:10.1038/sdata.2018.26.
6. **Coggon, M.M.**, McDonald, B., Vlasenko, A., Veres, P., Bernard, F., Koss, A., Yuan, B., Gilman, J., Peischl, J., Aikin, K., DuRant, J., Warneke, C., Li, S-M., and de Gouw, J.A. (2018). Diurnal variability and emission pattern of decamethylcyclopentasiloxane (D5) from the application of personal care products in two North American cities. *Environ. Sci. Technol.*, 52, 5,610–5,618, DOI:10.1021/acs.est.8b00506 .
7. Yuan, B., Koss, A.R., Warneke, C., **Coggon, M.M.**, Sekimoto, K., and de Gouw, J.A. (2017). Proton-transfer-reaction mass spectrometry: Applications in atmospheric sciences. *Chem. Rev.*, 117 (12), 13,187–13,229, DOI:10.1021/acs.chemrev.7b00325.
8. Yuan, B., **Coggon, M.M.**, Koss, A.R., Warneke, C., Eilerman, S., Peischl, J., Aikin, K., Ryerson, T.B., and de Gouw, J.A. (2017). Emissions of volatile organic compounds (VOCs) from concentrated animal feeding operations (CAFOs): chemical compositions and separation of sources. *Atmos. Chem. Phys.*, 17, 4,945–4,956, DOI:10.5194/acp-17-4945-2017.
9. Sekimoto, K., Li, S-M., Yuan, B., Koss, A.R., **Coggon, M.M.**, Warneke, C. and de Gouw, J.G. (2017). Calculation of the sensitivity of proton-transfer-reaction mass spectrometry (PTR-MS) for organic trace gases using molecular properties. *Int. J. Mass. Spec.*, 421, 71–94, DOI:10.1016/j.ijms.2017.04.006.
10. \*Huang, Y., **Coggon, M.M.**, Zhao, R., Lignell, H., Bauer, M.U., Flagan, R.C., and Seinfeld, J.H. (2017). The Caltech Photooxidation Flow Tube reactor: design, fluid dynamics and characterization. *Atmos. Meas. Tech.*, 10, 839–867, DOI:10.5194/amt-10-839-2017.
11. **Coggon, M.M.**, Veres, P., Yuan, B., Koss, A., Warneke, C., Gilman, J., Lerner, B., Peischl, J., Aikin, K., Stockwell, C., Hatch, L., Ryerson, T., Roberts, J., Yokelson, R., and de Gouw, J. (2016). Emissions of nitrogen-containing organic compounds from the burning of herbaceous and arboraceous biomass: fuel composition dependence and the variability of commonly used nitrile tracers. *Geophys. Res. Lett.*, 43, DOI:10.1002/2016GL070562.
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13. \*Thomas, D.A., **Coggon, M.M.**, Lignell, H., Schilling, K.A., Zhang, X., Schwantes, R., Flagan, R.C., Seinfeld, J.H., and Beuchamp, J.L. (2016). Real-time studies of iron oxalate-mediated oxidation of glycolaldehyde as a model for photochemical aging of aqueous tropospheric aerosols. *Env. Sci. Technol.*, 50 (22), 12,241–12,249, DOI:10.1021/acs.est.6b03588.
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  21. Zhang, X., Schwantes, R.H., McVay, R., Lignell, H., **Coggon, M.M.**, Flagan, R.C., Seinfeld, J.H. (2014). Vapor wall deposition in Teflon chambers. *Atmos. Chem. Phys. Discuss.* 14, 26,765–26,802.
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37. **Coggon, M.M.**, Sorooshian, A., Wang, Z., Metcalf, A.R., Frossard, A.A., Lin, J.J., Craven, J.S., Nenes, A., Jonsson, H.H., Russell, L.M., Flagan, R.C., Seinfeld, J.H. (2012). Ship impacts on the marine atmosphere: insights into the contribution of ship emissions to the properties of marine aerosol and clouds. *Atmos. Chem. Phys.*, 12, 8,439–8,458. DOI:10.5194/acp-12-8439-2012

38. **Coggon, M.**, Becerra, C.A., Nusslein, K., Miller, K., Yuretich, R, and Ergas, S. J. (2012) Bioavailability of jarosite for stimulating acid mine drainage attenuation. *Geochimica et Cosmochimica Acta*, 78, 65–76. DOI: 10.1016/j.gca.2011.11.030

\* Indicates co-first authorship

## Book Chapters

1. Schwantes, R.A., McVay, R.C., Zhang, X., **Coggon, M.M.**, Lignell, H., Flagan, R.C., Wennberg, P.O., Seinfeld, J.H. **Advances in Atmospheric Chemistry**, Chapter 1: Science of the Environmental Chamber. Singapore: World Scientific Publishing Co, 2017.

## Presentations

1. **Coggon, M.M.**. Deodorant, Cleaning Products, and the Virtue of Smelling Bad: Investigations into Emerging Sources of Air Pollution From Consumer Chemical Products. National Center for Atmospheric Research, Boulder, CO, April, 2018.
2. **Coggon, M.M.**. Deodorant, Cleaning Products, and the Virtue of Smelling Bad: Investigations into Emerging Sources of Air Pollution From Consumer Chemical Products. Department of Atmospheric Sciences, University of Wyoming, Laramie, WY, April, 2018.
3. **Coggon, M.M.**, Koss, A., Sekimoto, K., Yuan, B., Lim, C., Hagan, D., Kroll, J., Cappa, C., Jathar, S., Muller, M., Wisthaler, A., Gilman, J., Lerner, B., Jimenez, J., Yokelson, R., Roberts, J., de Gouw, J., Warneke, C.. OH oxidation of laboratory biomass burning VOCs during hte 2016 FIREX FireLab campaign: measurements from a PTR-ToF-MS. American Geophysical Union - Annual Conference, New Orleans, LA, December, 2017.
4. **Coggon, M.M.**, Veres, P., Yuan, B., Koss, A.R., Warneke, C., Gilman, J.B., de Gouw, J.A. Then and now: A look at urban air pollution sources emerging in the age of cleaner cars. School of Mines Civil and Environmental Engineering Seminar, Colorado School of Mines, Golden, CO, March ,2017
5. **Coggon, M.M.**, Veres, P., Yuan, B., Koss, A.R., Warneke, C., Gilman, J.B., Lerner, B., Peischl, J., Aikin, K., Stockwell, C., Hatch, L., Ryerson, T., Roberts, J., Yokelson, R.J., de Gouw, J.A. Investigating Impacts of Human Emissions on Air Quality in Colorado. International Global Atmospheric Chemistry Conference, Breckenridge, CO, September, 2016.
6. **Coggon, M.M.**, Veres, P., Yuan, B., Koss, A.R., McDuffie, E., Gilman, J.B., Lerner, B., Warneke, C., de Gouw, J.A. Investigating Impacts of Human Emissions on Air Quality in Colorado. Colorado Environmental Health Association Annual Education Conference, Breckenridge, CO, September, 2016.
7. **Coggon, M.M.**, Lignell, H., Nguyen, T.B., Schwantes, R.H., Schilling, K., Zhang, X., Sorooshian, A., Craven, J., Metcalf, A., Flagan, R.C., Seinfeld, J.H. Laboratory observations of heterogeneous aerosol processes. AirUCI Seminar, University of California, Irvine, CA, March, 2015.
8. **Coggon, M.M.**, Sorooshian, A., Wang, Z., Craven, J.S., Metcalf, A.R., Lin, J.J., Nenes, A., Jonsson, H., Flagan, R.C., Seinfeld, J.H. Observations of Terrestrial Biogenic and Biomass Burning Aerosol Impacts on Marine Stratocumulus off the Coast of California. American Geophysical Union - Annual Conference, San Francisco, CA, December, 2014.
9. **Coggon, M.M.**, Seinfeld, J.H. Differentiating between natural and anthropogenic pollution in the marine atmosphere. ESE & Society Seminar, California Institute of Technology, 2014.
10. **Coggon, M.M.**, Sorooshian, A., Wang, Z., Shingler, T., Metcalf, A.R., Frossard, A.A., Lin, J.J., Craven, J.S., Nenes, A., Jonsson, H.H., Russell, L.M., Flagan, R.C., Seinfeld, J.H. Ship Impacts on Marine Aerosol and Clouds. American Association of Aerosol Research - Annual Conference, Minneapolis, MN, October, 2012.

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